PATENT APPLICATION**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**Applicants: Paul F. Nealey *et al.*

Docket No.: 032026:0601

Serial No.: 09/971,442

Group Art Unit: 1756

Filed: October 5, 2001

Examiner: D. Chacko-Davis

For: **GUIDED SELF-ASSEMBLY OF
BLOCK COPOLYMER FILMS ON
INTERFEROMETRICALLY
NANOPATTERNED SUBSTRATES**

DECLARATION OF PAUL F. NEALEY UNDER 37 C.F.R. § 1.132

1. The below-named declarant, Paul F. Nealey, (hereinafter "I") is a named author of the paper, Yang *et al.*, "Guided Self-Assembly of Symmetric Diblock Copolymer Films on Chemically Nanopatterned Substrates," *Macromolecules*, Volume 33, (2000) pp. 9575-9582 (hereinafter "Yang *et al.*"). Yang *et al.* is co-authored by Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Harun H. Solak, and Franco Cerrina.

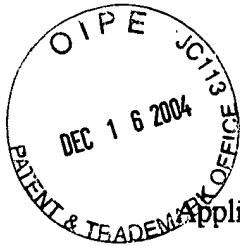
2. I am a named inventor, along with Xiao M. Yang, Richard D. Peters, Harun H. Solak, Franco Cerrina, Juan J. de Pablo, and Qiang Wang, of the above-referenced patent application.

3. I hereby declare that the material presented in Yang *et al.* related to guided self-assembly of block copolymer films on chemically nanopatterned substrates was derived from subject matter which was invented by myself jointly with Xiao M. Yang, Richard D. Peters, Harun H. Solak, Franco Cerrina, Juan J. de Pablo, and Qiang Wang.

I hereby acknowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001) and may jeopardize the validity of the above-referenced application or any patent issuing thereon. All statements made of declarant's own knowledge are true and all statements made on information and belief are believed to be true.

Paul Nealey
Paul F. Nealey

Oct 18, 2003
Date

PATENT APPLICATION**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**Applicants: Paul F. Nealey *et al.*

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DECLARATION OF RICHARD D. PETERS UNDER 37 C.F.R. § 1.132

1. The below-named declarant, Richard D. Peters, (hereinafter "I") is a named author of the paper, Yang *et al.*, "Guided Self-Assembly of Symmetric Diblock Copolymer Films on Chemically Nanopatterned Substrates," *Macromolecules*, Volume 33, (2000), pp. 9575-9582 (hereinafter "Yang *et al.*"). Yang *et al.* is co-authored by Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Harun H. Solak, and Franco Cerrina.

2. I am a named inventor, along with Xiao M. Yang, Paul F. Nealey, Harun H. Solak, Franco Cerrina, Juan J. de Pablo, and Qiang Wang, of the above-referenced patent application.

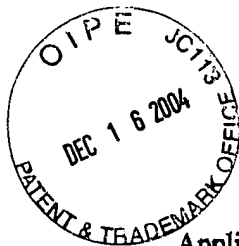
3. I hereby declare that the material presented in Yang *et al.* related to guided self-assembly of block copolymer films on chemically nanopatterned substrates was derived from subject matter which was invented by myself jointly with Xiao M. Yang, Paul F. Nealey, Harun H. Solak, Franco Cerrina, Juan J. de Pablo, and Qiang Wang.

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Richard D. Peters10/17/03

Date

PATENT APPLICATION**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**Applicants: Paul F. Nealey *et al.*

Docket No.: 032026:0601

Serial No.: 09/971,442

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Examiner: D. Chacko-Davis

For: **GUIDED SELF-ASSEMBLY OF
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NANOPATTERNED SUBSTRATES**

DECLARATION OF HARUN H. SOLAK UNDER 37 C.F.R. § 1.132

1. The below-named declarant, Harun H. Solak, (hereinafter "I") is a named author of the paper, Yang *et al.*, "Guided Self-Assembly of Symmetric Diblock Copolymer Films on Chemically Nanopatterned Substrates," *Macromolecules*, Volume 33, (2000) pp. 9575-9582 (hereinafter "Yang *et al.*"). Yang *et al.* is co-authored by Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Harun H. Solak, and Franco Cerrina.

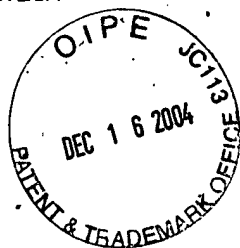
2. I am a named inventor, along with Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Franco Cerrina, Juan J. de Pablo, and Qiang Wang, of the above-referenced patent application.

3. I hereby declare that the material presented in Yang *et al.* related to guided self-assembly of block copolymer films on chemically nanopatterned substrates was derived from subject matter which was invented by myself jointly with Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Franco Cerrina, Juan J. de Pablo, and Qiang Wang.

I hereby acknowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001) and may jeopardize the validity of the above-referenced application or any patent issuing thereon. All statements made of declarant's own knowledge are true and all statements made on information and belief are believed to be true.

Harun H. Solak
Harun H. Solak

10.17.2003
Date

PATENT APPLICATION**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**Applicants: Paul F. Nealey *et al.*

Docket No.: 032026:0601

Serial No.: 09/971,442

Group Art Unit: 1756

Filed: October 5, 2001

Examiner: D. Chacko-Davis

For: **GUIDED SELF-ASSEMBLY OF
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DECLARATION OF FRANCO CERRINA UNDER 37 C.F.R. § 1.132

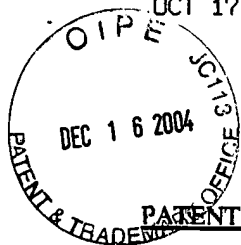
1. The below-named declarant, Franco Cerrina, (hereinafter "I") is a named author of the paper, Yang *et al.*, "Guided Self-Assembly of Symmetric Diblock Copolymer Films on Chemically Nanopatterned Substrates," *Macromolecules*, Volume 33, (2000) pp. 9575-9582 (hereinafter "Yang *et al.*"). Yang *et al.* is co-authored by Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Harun H. Solak, and Franco Cerrina.

2. I am a named inventor, along with Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Harun H. Solak, Juan J. de Pablo, and Qiang Wang, of the above-referenced patent application.

3. I hereby declare that the material presented in Yang *et al.* related to guided self-assembly of block copolymer films on chemically nanopatterned substrates was derived from subject matter which was invented by myself jointly with Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Harun H. Solak, Juan J. de Pablo, and Qiang Wang.

Franco Certina

October 17, 2003
Date



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Paul F. Nealey *et al.*

Docket No.: 032026:0601

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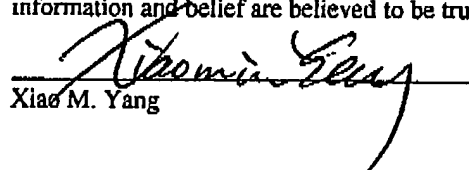
DECLARATION OF XIAO M. YANG UNDER 37 C.F.R. § 1.132

1. The below-named declarant, Xiao M. Yang, (hereinafter "I") is a named author of the paper, Yang *et al.*, "Guided Self-Assembly of Symmetric Diblock Copolymer Films on Chemically Nanopatterned Substrates," *Macromolecules*, Volume 33, (2000) pp. 9575-9582 (hereinafter "Yang *et al.*"). Yang *et al.* is co-authored by Xiao M. Yang, Richard D. Peters, Paul F. Nealey, Harun H. Solak, and Franco Cerrina.

2. I am a named inventor, along with Richard D. Peters, Paul F. Nealey, Harun H. Solak, Franco Cerrina, Juan J. dePablo, and Qiang Wang, of the above-referenced patent application.

3. I hereby declare that the material presented in Yang *et al.* related to guided self-assembly of block copolymer films on chemically nanopatterned substrates was derived from subject matter which was invented by myself jointly with Richard D. Peters, Paul F. Nealey, Harun H. Solak, Franco Cerrina, Juan J. de Pablo, and Qiang Wang.

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Xiao M. Yang

10/17/03
Date